The first (2022) and the second (2024) Forum of European Physical Society (epsforum.org)

I am here to advertise another meeting, but..

We are nearly at the end of the agenda of Fysikermøtet2023

This meeting featured an impressively large audience and a very interesting agenda! Lots of material for thoughts! (IMHO).

Big thanks to the Organizing Committee and Hilde Nesse in particular.

We have been discussing long term predictions ..Long term prediction of experimental growth suffer from "catastrophe-collapse factor". Exponential growth of energy needs of humanity will collapse when a large part of presently populated Earth becomes inhabitable due to climate change.

There is one sure prediction about far future.

If we do not collaborate NOW to address global challenges- it will not exist.

Ancient Rome 1-2 CE, with 1 million inhabitants, running water and public sewage systems...,, that needed expansion. However the social and political system was not robust enough to survive the environmental changes and the following power re-configurations, that they caused themselves. In the 4 CE, the population of Rome was reduced to 40 thousand people.











The first (2022) and the second (2024) Forum of European Physical Society (epsforum.org). Highlights

THE EPS **FORUM**

MARCH, 25>27 - 2024

HENRY FORD BUILDING. FREIE UNIVERSITÄT. BERLIN

A forum is the place to talk and to get your voice heard! Come! (the mikes were working)

#EPSForum2024



REPRESENTING 42 NATIONAL PHYSICAL SOCIETIES AND 130'000 RESEARCHERS, THE **EUROPEAN PHYSICAL SOCIETY** (EPS) ADVOCATES PHYSICS AND ITS CONTRIBUTION TO THE ECONOMIC, TECHNOLOGICAL, SOCIAL AND CULTURAL **DEVELOPMENT IN EUROPE.** IT PROMOTES EXCELLENCE IN PHYSICS RESEARCH AND **COOPERATION WITH PHYSICS-BASED INDUSTRIES, EDUCATION** AND STUDENT MOBILITY, PUBLICATION AND OUTREACH.

The EPS Young Minds Programme gives young researchers the opportunity to lead teams, organise events for networking, public outreach and career development It is open to all enthusiastic young researchers in Europe and gathers the next generation of leaders in science.

Associate Members are represented in the EPS committees and Council. EPS Associate Membership is an exclusive opportunity to valorise physics research, industrial applications and societal projects.

















































CONFERENCE CENTER SORBONNE UNIVERSITY PARIS, FRANCE



FOR MORE INFORMATION VISIT: WWW.EPS.ORG/FORUM

- CONFERENCES **ROUND TABLES**
- WORKSHOPS -





The Forum Format

Invited fundamental physics talks

Presentation and stands (~50) from physics-based companies and start-ups, exchanges/recruitment with students enabled

Round tables on hot topics with "online" questions from the audience who can "grill" the speakers.

"Young Minds" session and workshop

Poster session.

Thematic workshops, some of them hands-on.

A "EPS prize winner" talk.

The Forum Format (2022 examples)

Invited fundamental physics talks.



JUNE. 3rd | 8:30 → 9:15 | AUDITORIUM PROF. BARRY BARISH

Laureate of the 2017 Nobel Prize in Physics, University of California at Los Angeles, USA

> "Gravitational waves from detections to a new science"



JUNE, 3rd | 9:15 → 10:00 | AUDITORIUM

PROF. SERGE HAROCHE

Laureate of the 2012 Nobel Prize in Physics, École Normale Supérieure & Collège de France, Paris, France

"Power and strangeness of quantum physics'



JUNE, 3rd | 10:00 → 10:45 | AUDITORIUM

PROF. JOHN MICHAEL

KOSTERLITZ

Laureate of the 2016 Nobel Prize in Physics, Brown University, Providence, RI, USA

"State selection in driven out of equilibrium systems. Noisy stabilized Kuramoto-Sivashinsky equation"

as well as talks from "political powers" and industry (few examples):



JUNE, 2nd |9:00 → 9:45 | AUDITORIUM

EU COMMISSIONER MARIYA GABRIEL

European Commissioner for Innovation, Research, Culture, Education and Youth, Brussels, Belgium

"Filling the gap between science and innovation"

M. FÖRTSCH, Q. ANT GmbH, Germany. "Photonic quantum technology"

TALK

A. CANDELLI, LUMICKS, The Netherlands. "Investigating force-dependent biological mechanisms in cancer therapies"

TALK

F. GONZALES-ZALBA, Quantum Motion, United Kingdom. "Using silicon to develop useful quantum computers"

J. F. MORIZUR, Founder & CEO, Cailabs, France. "From PhD to CEO: making an exciting leap into business"







The Forum Format (2022 examples)

Round tables on hot topics (examples)

ROUND TABLE

"Energy and sustainability"

C. ROSSEL (moderator), IBM Zürich & EPS, Switzerland.

G. BEDON, Head of Modelling Solutions, Ørsted, Denmark.

S. BERLIJN, Head of Division Energy Systems, KTH Royal Institute of Technology, Stockholm, Sweden.

D. CHARTOUNI, Corporate Research Fellow on Energy Storage, ABB, Switzerland.

P. SERRE-COMBE, Deputy Managing Director of Energy Programs, CEA, France.

N. SCHMITT, R&D Scientific Director for Europe, Air Liquide, France.

ROUND TABLE

"Societal applications of accelerator technologies" M. MORANDIN (moderator), INFN, Italy. M. PLESKO, CEO and founder of Cosylab, Slovenia. A. PELLECCHIA, Director of ASG Superconductors SpA, Italy.

J. MANDRILLON, Accelerator Physicst at IBA, Belgium. S. DAHL-PETERSEN.

General Sales Manager at Danfysik, Denmark.

S. GAMMINO, Director of Laboratori Nazionali del Sud - INFN, Italy.

ROUND TABLE

"Quantum computing: where are we heading?" E. SÁNCHEZ BAUTISTA (moderator), EPS Policy Officer, Brussels, Belgium. J. GOETZ, CEO & Cofounder of IOM, Finland. L. HENRIET, CTO, PASOAL, France. A. LANDRAGIN, IXBlue, Cofounder of MUQUANS, France. H. RIEL, Head Science & Technology, IBM Research, Switzerland. P. SENELLART-MARDON,

ROUND TABLE

"Future research related to accelerators, particle and nuclear physics" T. PEÑA (moderator), University of Lisbon and LIP, Portugal E. RABINOVICI (moderator), President of the CERN Council, Geneva, Switzerland. N. ALAHARI, Director of GANIL, Caën, France. P. COYLE, IN2P3 & Centre de Physique des Particules de Marseille, France. P. GIUBELLINO, Scientific Managing Director of GSI and FAIR, Darmstadt, Germany. S. KATSANEVAS, Director of the European

J. MNICH, Director for Research and Computing,

Gravitational Observatory, Pisa, Italy.

CERN, Geneva, Switzerland.

Cofounder of QUANDELA,

Palaiseau, France.

ROUND TABLE

"From Physicist to Data Scientist" J. LEIRIA (moderator), University of Coimbra, Portugal. J. BOBIN, Researcher at CEA Saclay, Signal processing/Astrophysics, Saclay, France. T. BRUNSCHWILLER, Smart System Applications

at IBM Research, Zurich, Switzerland.

K. NILSSON, PeripherAi, Germany.

N. ROSA, Data scientist at Closer Consulting, Lisbon, Portugal.

I. STRÜMKE, Adjunct Research Scientist at Simula. Oslo, Norway.

ROUND TABLE

Germany.

"Physics for life: the single molecule revolution" F. RITORT (moderator), Small Biosystems Lab, University of Barcelona, Spain. P. BAASKE, Cofounder & CEO of NanoTemper, Germany. M. RIBEZZI-CRIVELLARI, ESPCI Paris-Tech and Group Leader, Directed Evolution at Ouantum-Si, France. L. JAYASINGHE, Vice-President, R&D - Oxford Nanopore Technologies, Oxford, UK. L. ODDERSHEDE, Senior Vice President, Novo Nordisk Foundation, Denmark. W. PEUTZ, Head of Sales & Customer Success at LUMICKS, The Netherlands J-P. SOBCZAK, CEO of Tilibit nanosystems GmbH, Munich,





The Forum Format (2022 examples)

Workshops and hands-on:

OISKIT WORKSHOP

"Quantum Computing with Oiskit" S. PFAENDLER, P. OLLITRAULT & H. RIEL. IBM Research, Switzerland

MASTERCLASS

"Scientific writing" A. RUIMY. EDP Sciences, France. & G. MUGA, EPL Editor in Chief, Bilbao, Spain.

HANDS-ON "OUANTUM DEMONSTRATOR"

S. KUBSKY, Soleil Synchrotron, France. J. MEIER (online), Felix Bloch Institute, University of Leipzig, Germany.

HANDS-ON SESSION "PERCEVAL"

J. SENELLART, Head of software engineering, Quandela, France. P.-E. EMERIAU, Quantum information scientist, Quandela, France.

WORKSHOP

"Co-innovation between industry and academia in the field of particle accelerators" - Part I

M. VRETENAR. CERN. Switzerland. "The EU Support to accelerator Co-innovation: the IFAST Programme"

D. NEWBOLD, STFC Rutherford Appleton Laboratory, UK Research & Innovation, UK. "Outcome and conclusions of the ECFA accelerator R&D roadmap"

2024 EPS FORUM will have a similar format:

Whether you are an individual researcher or student or representing a company – this is the forum for you!





Selected Highlights from recent EPS activities

2020: publication of the report on "The Importance of Physics to the Economies of Europe",

The link https://cds.cern.ch/record/2703434?ln=en

It shows that the physics-based sector accounts for 16% of the total turnover of the EU28 business economy and employed 17.8 million people in 2016, more than a million more than in 2011

EPS actively participated in the successful petition to have the portfolio title of EU commissioner Maryia Gabriel amended by the terms "education, research and culture" highlighting the importance of education and research for the European Community.

EPS Historic Sites declared in 2021:

- · 7 April 2021: Sonnenborgh, Utrecht, Netherlands
- 6 August 2021: Philologicum, Anders Ångström's laboratory, Uppsala Sweden
- 7 June 2021 City of Jena, Jena Germany
- 6 October: Musée Ampère, Lyon, France
- · 12 October 2021: Cyclotron Hall, Leuven, Belgium
- · 15 October 20212: Magnus-Haus Berlin, Germany

A "Code of Conduct" prohibiting any act of discrimination and harassment. sexual or moral, during EPS-managed events was drawn up - online reporting portal Several member societies expressed interest in adopting it.

IOP publication resulting from the meeting on "PHYSICS FOR SOCIETY: GRAND CHALLENGES IN THE HORIZON 2050" that was held at the Magnus Haus in Berlin from 28 to 29 October 2021.





Thank you for your attention!





